



Date: November 4, 2014

To: Thomas J. Bonfield, City Manager
Through: Keith Chadwell, Deputy City Manager
From: Mark D. Ahrendsen, Transportation Director

Subject: U-3308 NC 55 (Alston Avenue) Widening Municipal Agreement

Executive Summary

The N. C. Department of Transportation (NCDOT) is scheduled to widen NC 55 (Alston Avenue) from NC 147 to NC 98 (Holloway St.). Project bidding begins in April 2015 with two years of construction. In addition to widening Alston Avenue, the project includes replacing the Alston Avenue bridge over NC 147, the Pettigrew Street bridge over Alston Avenue, and the North Carolina Railroad bridges over Alston Avenue. As part of the project, the City requested the inclusion of sidewalks along Alston Avenue and other streets affected by the project, brick pavers between the sidewalks and curb in a portion of the project, and stamped and stained decorative concrete crosswalks at the intersections of Angier Avenue, Main Street, and Holloway Street. Existing sidewalks will be replaced at no cost to the City. New sidewalks, brick pavers, and the decorative crosswalks are recommended to be funded with 80 percent federal Surface Transportation Program – Direct Attributable (STP-DA) funds through the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) and 20 percent City of Durham matching funds. The estimated cost to the City is \$57,327.00. A map of the overall project is provided in Attachment A.

Recommendation

The Department of Transportation recommends that the City Council authorize the City Manager to execute the U-3308 NC 55 (Alston Avenue) Municipal Agreement with the N. C. Department of Transportation at an estimated cost of \$57,327.00. The agreement is provided as Attachment B.

Background

Widening Alston Avenue from NC 147 to Holloway Street has been an element of the DCHC MPO's long-range plan for many years. NCDOT first initiated the planning for this project with community meetings in 2003. Due to the complexity of widening in this dense, urban area with several historic structures and important community resources and businesses along the corridor, the environmental study was not completed until 2013. The project was modified and redesigned several times throughout this process in response to requests by the City, community residents, and to address environmental justice issues. The Right-of-Way Consultation Report signed by NCDOT and the Federal Highway Administration in February 2013 includes the final project commitments for the project. NCDOT is currently acquiring right-of-way for the project.

The project includes widening Alston Avenue to four lanes from just south of NC 147 to just north of NC 98 (Holloway Street). The Alston Avenue bridge over NC 147, the Pettigrew Street bridge over Alston Avenue, and the North Carolina Railroad bridges over Alston Avenue will be replaced. Initially, Alston Avenue from NC 147 to Main Street will be striped for 11-foot inside lanes and 14-foot outside lanes, and Alston Avenue from Main Street to Holloway Street will be striped for one 11-foot lane in each direction, 4-foot bike lanes, a 4-foot buffer area, and a 8-foot parking area. The section from Main Street to Holloway Street can be converted to four traffic lanes when the Average Daily Traffic reaches 20,000 vehicles per day. There will be a median for most of the project length, and the City has requested landscaping within the median where possible. To minimize impacts to the Golden Belt Historic District, Worth Street, Franklin Street, and Wall Street on the west side of Alston Avenue will be converted to one-way streets, and Wall Street on the east side of Alston Avenue will become a cul-de-sac. The City will be responsible for the installation of streetlights through Duke Energy. Pedestrian lighting under the bridges is included in the project.

During the preparation of the environmental document by NCDOT, the project was redesigned to avoid taking the Los Primos grocery store at the northwest corner of Main Street and Alston Avenue. NCDOT determined that taking Los Primos would have had a disproportionately high and adverse effect on a minority and low-income community. The redesign of the project shifted Alston Avenue to the east. The widened roadway will fit in between Los Primos and the Durham Rescue Mission buildings. Several other changes were made to the design of the project during the environmental study including lowering the design speed, tightening curb radii at intersections, and the elimination of exclusive right-turn lanes at most intersections to shorten the crossing distance for pedestrians and calm traffic.

Issues and Analysis

As currently planned, the project will include the construction of new sidewalks on many roads and the replacement of existing sidewalks. There will be continuous sidewalks along both sides of Alston Avenue. As requested by the City, these sidewalks will mostly be 6-foot wide sidewalks which are one foot wider than the existing 5-foot wide sidewalks. Most of the sidewalks to be built along the intersecting streets will be 5-foot sidewalks. Four-foot sidewalks had to be used on sections of some intersecting streets due to space limitations and to avoid impacts to residences. The following streets will have sidewalks replaced or added along the portions of the streets affected by this project: Gann Street, Chatham Street, Pettigrew Street, Angier Avenue, Main Street, Morning Glory Avenue, Worth Street, Franklin Street, Wall Street, Taylor Street, Liberty Street, Eva Street, and Holloway Street.

Per NCDOT policy, the State will replace existing sidewalks affected by the project at no cost to the City. For new sidewalks or the incremental addition of width to existing sidewalks, there are two options. The City and NCDOT could share the costs 50 percent each or the DCHC MPO could provide 80 percent of the funding with STP-DA funds and the City could provide the 20 percent local match. As requested by the City of Durham, the DCHC MPO has approved the use of STP-DA for these costs. The total estimated cost of the new sidewalks is \$154,732.00 and the estimated cost to the City is \$30,946.00.

In addition to the sidewalks, the City requested that the project include brick pavers in between the sidewalks and the curbs on the section of Alston Avenue between Main Street and Taylor Street. Most of this section is through the Golden Belt Historic District, and space limitations only allowed for a 1 to 3-foot space in between the sidewalks and the curbs. Instead of a difficult to maintain narrow grass

strip, the area will be filled in with decorative brick pavers that also serves to widen the space for pedestrians. Brick pavers will be installed at a cost of \$36,225.00.

The City also requested streetscape enhancements at major intersections along the project. Stamped and stained concrete crosswalks will be installed at Angier Avenue, Main Street, and Holloway Street. The design will be similar to the downtown streetscape project. Decorative crosswalks will not be installed at the traffic signals at Taylor Street or Liberty Street. Due to the proximity to Eastway Elementary School, these two intersections will have high visibility painted crosswalks. The total cost of the stained and stamped concrete crosswalks and the concrete headers for crosswalks is \$95,680.00.

The brick pavers and concrete crosswalks are considered betterments that the City is either 100 percent responsible for funding or could also be funded 80 percent with DCHC MPO STP-DA funds and 20 percent City funds. As requested by the City of Durham, the DCHC MPO has approved the use of STP-DA funds for these costs. Upon project completion, the City will assume the ongoing sidewalk and betterment maintenance and liability.

Estimated Sidewalk and Betterment Costs

	100% Cost	80% DCHC MPO STP-DA	20% City of Durham
New Sidewalks	\$154,732.00	\$123,786.00	\$30,946.00
Brick Pavers	\$36,225.00	\$28,980.00	\$7,245.00
Stained and Stamped Crosswalks	\$58,161.00	\$46,529.00	\$11,632.00
Concrete Header for Crosswalks	\$37,519.00	\$30,015.00	\$7,504.00
Total	\$286,637.00	\$229,310.00	\$57,327.00

The project will also require the relocation and adjustment of City utilities located within NCDOT right-of-way. The Public Works Department provided NCDOT evidence that the utilities along Alston Avenue pre-date NCDOT's ownership of the roadway. As a result, the utilities will be relocated and adjusted at no cost to the City of Durham. A separate Use and Occupancy Agreement will be required to describe the terms of the City utility relocation impacts.

Alternatives

- Authorize the City Manager to execute the Municipal Agreement with the North Carolina Department of Transportation for U-3308 NC 55 (Alston Avenue) Widening at an estimated City cost of \$57,327.00.
- Do not authorize the execution of the Municipal Agreement with the North Carolina Department of Transportation for U-3308 NC 55 (Alston Avenue) Widening. The project cannot proceed without City concurrence.

Financial Impact

Upon completion of the project, the City is responsible for reimbursing NCDOT 20 percent of the final actual cost, including administrative costs, of the work associated with the sidewalk and Betterment construction. The estimated cost of the sidewalks and Betterments is \$286,637.00 and the estimated cost to the City is \$57,327.00. The required City matching funds are available in the City's Capital Improvement Program's Federal-State Matching Project.

SDBE Summary

NCDOT municipal agreements require that their contracting procedures be followed for these projects. The Department of Equal Opportunity/Equity Assurance did not review this item for compliance with the Ordinance to Promote Equal Business Opportunities in City Contracting.

Attachments

A – Project Map

B – Municipal Agreement